

PATENT**Application # 10/035,306****Attorney Docket # 2000-0534 (1014-164)****AMENDMENTS****AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A method for maintaining performance of a network having at least one element, comprising the steps of:

periodically monitoring at least one attribute of the one network element at successive first intervals;

comparing each monitored attribute obtained during each successive first interval to a corresponding threshold associated with the attribute to establish a historical trend for each network element;

determining, from the historical trend associated with each of the monitored elements if there exists at least one critical attribute of each monitored elements that warrants closer scrutiny, and if so;

periodically monitoring at least one critical attribute during successive second intervals, each shorter than each said first interval, to determine whether each monitored element exhibits persistent performance degradation; and

monitoring each network element that exhibits persistent performance degradation at successive third intervals that are shorter than the successive second intervals.

2. (Original) The method according to claim 1 further including the step of altering the one monitored network exhibiting persistent performance degradation to ameliorate the degradation.

3. (Currently Amended) The method according to claim 1, ~~further including the wherein~~ said steps-step of:

monitoring each network element that exhibits persistent performance degradation occurs in real time ~~at successive third intervals that are shorter than the successive second intervals.~~

4. (Original) The method according to claim 1 wherein each successive first interval is a week in length.

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5. (Original) The method according to claim 1 wherein each successive first interval is one day in length.

6. (Original) The method according to claim 1 wherein each successive first interval is one hour in length.

7. (Original) The method according to claim 1 wherein each successive second interval is ten minutes in length.

8. (Currently Amended) A method for maintaining performance of a network having at least one element, comprising the steps of:

periodically monitoring at least one attribute of the one network element at successive first intervals, said one attribute determined from a failure model for said one network element;

comparing each monitored attribute obtained during each successive first interval to a corresponding threshold associated with the attribute to establish a historical trend for each network element;

determining, from the historical trend associated with each of the monitored elements if there exists at least one critical attribute of one of said monitored elements that warrants closer scrutiny, and if so;

periodically monitoring at least one critical attribute during successive second intervals, each shorter than each said first interval, to determine whether said monitored element exhibits persistent performance degradation; and

monitoring each network element that exhibits persistent performance degradation at successive third intervals that are shorter than the successive second intervals.

9. (Currently Amended) The method according to claim 8, ~~further including the~~ wherein said steps-step of:

monitoring each network element that exhibits persistent performance degradation occurs

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in real time at successive third intervals that are shorter than the successive second intervals.

10. (Original) The method according to claim 8 wherein each successive first interval is a week in length.

11. (Original) The method according to claim 8 wherein each successive first interval is one day in length.

12. (Original) The method according to claim 8 wherein each successive first interval is one hour in length.

13. (Original) The method according to claim 8 wherein each successive second interval is ten minutes in length.

14. (Original) The method according to claim 8 further including the step of determining from the failure mode of the monitored element which if any additional attributes require monitoring upon detecting a performance degradation.